105-04824/

Ministry of Forests
INFORMATION MANAGEMENT GROUP

# *Corporate Reporting System Report Administration*

## USER MANUAL

CRSRA

VERSION 2.0

May 2002

Province of
British Columbia

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# 1 Introduction

**The Corporate Reporting System Report Administration (CRSRA) application is designed to maintain the reports used in the Corporate Reporting System Report Menu application. Using this utility, the report administrator can add, edit, delete and disable reports for the CRSRM application.**

**This user manual contains 6 sections, each detailing the procedures to follow to accomplish a specific task when using the CRSRA. Placed throughout this document are screen shots of various activities to be used as an example of typical usage of the application.**

**It is assumed that you are familiar with the concept of Reports for the Ministry of Forests and terms such as Crystal Reports, Stored Procedures and views.**

# 2 Accessing the Reporting Administrator

## 2.1 Copying the Forest Practices Annual Report File

2.1.1 Copy your RPT file to the web server directory that stores the Forest Practices Annual Reports.

## 2.2 Open the application

2.2.1 Type the URL for CRSRA into the address bar in Internet Explorer and hit ENTER.

## 2.3 Security Access

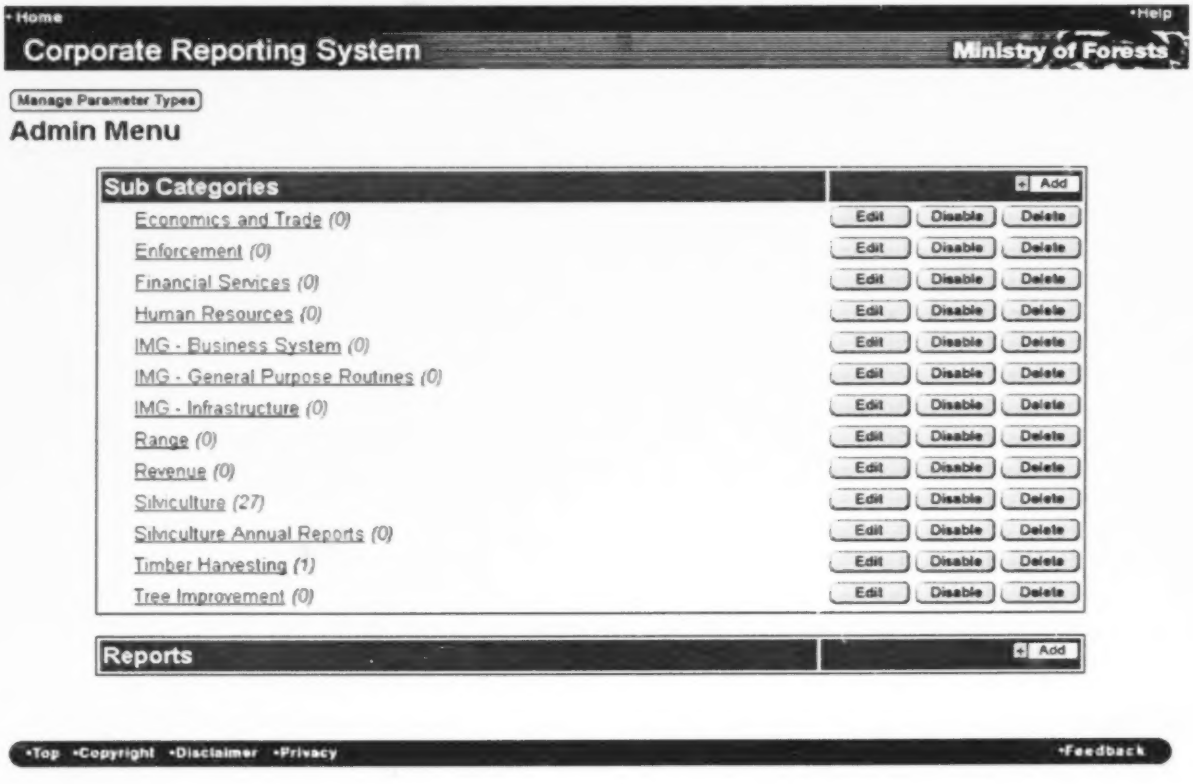
2.3.1 If you do not have security access to this page, you will see a blank screen. If you have security access, then you will see the Admin menu. If you do not have permission to access CRSRA and require access, please contact the system administrator.

## 2.4 Select Sub-category

2.4.1 From the admin menu screen, select the sub-category that contains the report you want to edit, or where you want the new report to appear on the menus.

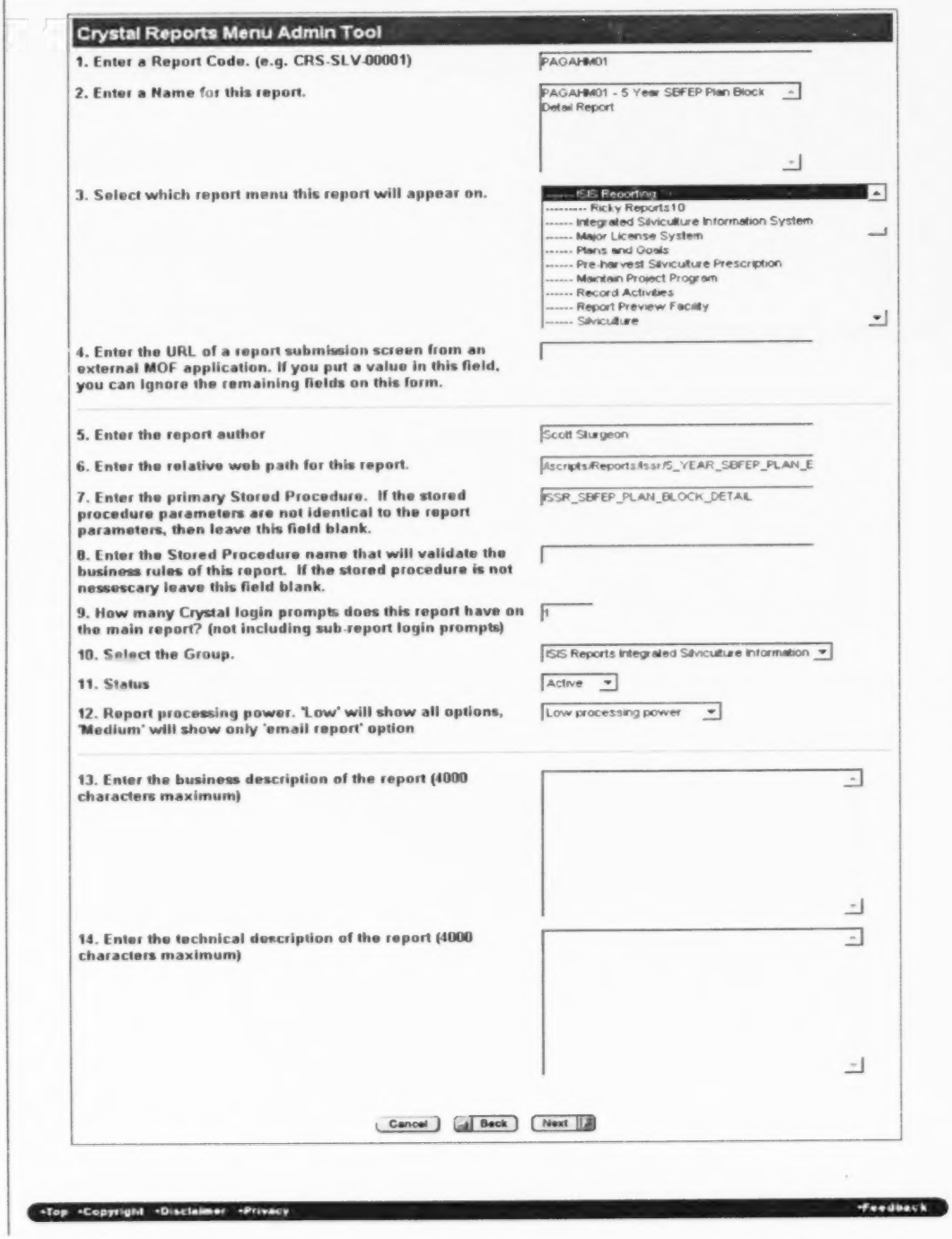
## 2.5 Adding a new Report

2.5.1 To add a new report, click on the Add button in the reports section of the Admin menu. There are two Add buttons, so make sure you select the one in the "reports" section. To edit a report, locate the report that you want to edit, and click on the Edit button beside that report.



# 3 Editing/Adding a New Report

## 3.1 Fill in the report information form


Crystal Reports Menu Admin Tool
1. Enter a Report Code. (e.g. CRS-SLV-00001)
PAGAHM01
2. Enter a Name for this report.
PAGAHM01 - 5 Year SBFEP Plan Block Detail Report
3. Select which report menu this report will appear on.
----- ISIS Reporting
--------- Ricky Reports10
------ Integrated Silviculture Information System
------ Major License System
------ Plans and Goals
------ Pre-harvest Silviculture Prescription
------ Maintain Project Program
------ Record Activities
------ Report Preview Facility
------ Silviculture
4. Enter the URL of a report submission screen from an external MOF application. If you put a value in this field, you can ignore the remaining fields on this form.
5. Enter the report author
Scott Sturgeon
6. Enter the relative web path for this report.
/scripts/Reports4/ssr/S_YEAR_SBFEP_PLAN_E
7. Enter the primary Stored Procedure. If the stored procedure parameters are not identical to the report parameters, then leave this field blank.
ISSR_SBFEP_PLAN_BLOCK_DETAIL
8. Enter the Stored Procedure name that will validate the business rules of this report. If the stored procedure is not nessescary leave this field blank.
9. How many Crystal login prompts does this report have on the main report? (not including sub-report login prompts)
1
10. Select the Group.
ISIS Reports Integrated Silviculture Information
11. Status
Active
12. Report processing power. 'Low' will show all options, 'Medium' will show only 'email report' option
Low processing power
13. Enter the business description of the report (4000 characters maximum)
14. Enter the technical description of the report (4000 characters maximum)
Cancel
Back
Next
•Top •Copyright •Disclaimer •Privacy
•Feedback

**3.2 Enter a report code.**

**3.2.1** Report codes are in the form CRS-XXX-00000. Report codes replace XXX with the three-letter code for the department who the report is for.

All report codes begin with CRS. Replace 00000 with a 5-digit code unique to the department. For example, there can be a CRS-SLV-00015 and a CRS-REV-00015, but there cannot be two reports with the code CRS-SLV-00015.

**3.3 Enter a name for this report.**

3.3.1 This value can be up to 255 characters. The value you enter here will appear on the report menu as the name of the report.

**3.4 Select which report menu this report will appear on.**

3.4.1 This field will default to the category that you were in when you clicked on the 'Add' button to add a new report

**3.5 Enter the URL of a report submission screen from an external MOF application. If you put a value in this field, you can ignore the remaining fields on this form.**

3.5.1 This field will tell the program to redirect to an external URL to display a custom report parameters screen.

**3.6 Enter the report author.**

3.6.1 Enter the name of the person who created the RPT file. If the author is a contractor, include the name of the contractor's company.

**3.7 Enter the relative web path for this report.**

3.7.1 The report server is configured in the web.xml file of the public web application. On this screen, you just need to enter the path of the .RPT file, beginning with a forward slash "/". For example, "/stumpage_revenue_by_tfl.rpt".

**3.8 Enter the primary stored procedure.**

3.8.1 The stored procedure name is necessary for the Access and CSV export formats. These formats actually run the stored procedure and take the data from the result set. They do not use Crystal in any way. An example of a stored procedure name is CRS_AREA_HARVESTED_BY_SILV.

3.8.2 If the report was created without a stored procedure, by directly linking Crystal Reports to the Oracle database tables, then leave this field blank. The Access and CSV export formats will not be available for your report.

3.8.3 **It is also important to note that the parameters that are specified for the Crystal Report must exactly match the parameters of the stored procedure. The order of the parameters, data types, and number of parameters must match.** If for some reason the Crystal parameters do not match the stored procedure parameters, then you must leave this field blank. The Access and CSV export formats will be not be available for your report.

3.8.4 If your report uses multiple stored procedures, or if your report has sub-reports, and those sub-reports also use stored procedures, then you must select one "primary" stored procedure. **Only the data from the primary stored procedure can be exported to Access and CSV.** The stored procedure that you designate as the primary stored procedure must have identical parameters to the Crystal

Report. If none of your stored procedures have identical parameters to the Crystal Report, then leave this field blank. The Access and CSV export formats will not be available for your report.

3.8.5 The stored procedure field is the only optional field on this form. All other fields are required.

**3.9 Enter the Stored Procedure name that will validate the business rules of this report. If the stored procedure is not necessary leave this field blank.**

3.9.1 The purpose of this option is to perform a business rules validation of the report. The stored procedure is an Oracle function in the following format

<string> ={call <procedure_name>(<param1>, ..., <paramN>)

The string that is returned is either <null> if there are no validation errors, or a string describing the problems with the parameters that have been keyed in.

The way that this might be used is for validation the valid parameters that have been keyed in by the user. For example: If the user can choose from five parameters but only three can be keyed in if a date is older that a certain value. Then this stored procedure would be used to validate what parameters the user has selected.

3.9.2 **It is also important to note that the parameters that are specified for the Crystal Report must exactly match the parameters of the validation-stored procedure. The order of the parameters, data types, and number of parameters must match.** If you do not need to perform validation on your report, then you must leave this field blank.

**3.10 Enter number of Crystal Login Prompts.**

3.10.1 How many Crystal login prompts does this report have on the main report? (not including sub-report login prompts). The web component server requires the Oracle user name and password to be passed to Crystal Reports once for every database object accessed by the main report, and once for every database object accessed by each sub-report. **To determine the value to enter on this screen, open the RPT file in the Crystal Designer, and look to see how many data sources are being used.** Each stored procedure, view, or table counts as one data source. If your report is using a stored procedure, there is usually only one Crystal login prompt.

**3.11 Select the Group**

3.11.1 A report can belong to one group. The groups are used to control access to the reports from users. A user would have to belong to the same group a report is in to be able to see and run it.

**3.12 Status**

3.12.1 The status defaults to "disabled". When a report is disabled, you can run it from the admin screen, but it does not appear on the public interface where non-admin users can see it. Once you have tested the report, and you are confident that it works, it is then safe to enable the report.

**3.13 Report processing power. 'Low' will show all options, 'Medium' will show only 'email report' option**

3.13.1 This option will determine what options the user has available to them to generate the report. If the option is set to 'Low', then the user can generate the report immediately or create a batch report to email job. If the option is set to 'Medium' then the user will only be able to select the batch job.

### 3.14 Enter the business description of the report

3.14.1 The field will store the business description of the report. This field will be displayed to the user on the report parameter entry screen or the report description screen.

### 3.15 Enter the technical description of the report

3.15.1 The field will store the technical description of the report. This field will be displayed to the report description screen.

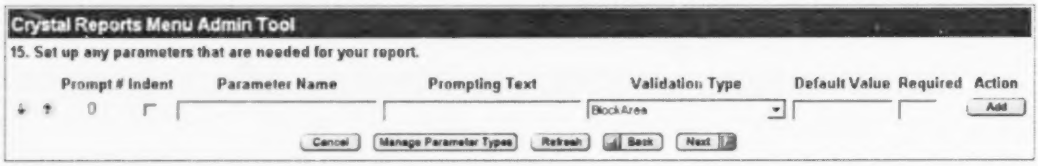
### 3.16 Other form elements on this screen

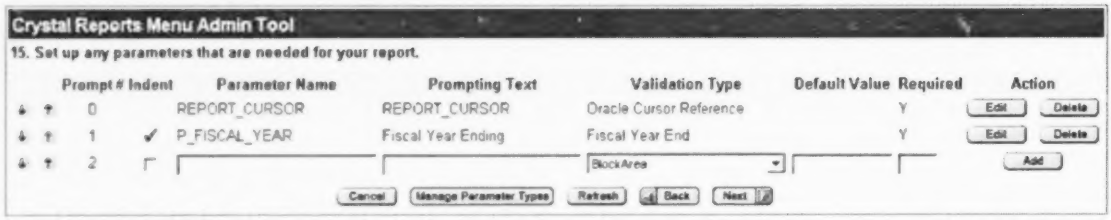
| | |
|---|---|
| Cancel | Return to the admin menu. Category will default to the category containing this report. All changes to the list will be lost, unless you click on Back or Next |
| Back | Save changes and return to the previous screen (the admin menu). |
| Next | Save changes and move to the next screen (the parameter information screen) |

# 4 Entering Parameter Information

### 4.1 Click on the next button to move to the parameter information screen.

### 4.2 Enter Parameter Information





### 4.3 Indent

4.3.1 This parameter affects the display of the report on the screen. If this value is selected then when the parameter is drawn, it will be shown with an indent.

This option is useful to allow the report designer to visually show parameters as being nested under other parameters.

### 4.4 Parameter Name

4.4.1 Parameter Name is the name used to refer to the parameter in Crystal Reports. If the report is using a stored procedure, then the parameter names will also be the names of the stored procedure parameters. If you open the rpt file in the Crystal Designer, and then select Insert => Parameter from the menu bar, you will see a list of all the parameters used by the report.

### 4.5 Prompting Text

4.5.1 Prompting Text specifies the text used to prompt users to enter the parameter on the public interface. For example, a fiscal year pull-down looks like this:

March 31, 2001

If you specify "Fiscal Year Ending" as the Prompting Text, then this is what the users will see.

**Fiscal Year Ending** March 31, 2001

### 4.6 Validation Type

4.6.1 Validation Type is used to specify what kind of form widget will be used to prompt the user. For example, the fiscal year pull-down shown above is selected by choosing the validation type "Fiscal Year End". There are a five built in validation types in version 1.0:

4.6.2 Fiscal Year End

March 31, 2001

All fiscal years with extract data are shown in the pull-down. The CRS_ADMIN_EXTRACT table in Oracle is used to generate this list.

4.6.3 Oracle Cursor Reference

The user will not be prompted to enter a value for cursor parameters.

Oracle Stored Procedure data sets are passed to Crystal using an IN/OUT cursor parameter. Although this parameter is not modifiable, it will appear in the list of report parameters in the Crystal Designer, and it is relevant when assigning parameters to prompt numbers for the Web Component Server. (e.g. /sample.rpt?Prompt0=&Prompt1=2000) .

4.6.4 Date

2001 04 19

The date is represented as three pull-down menus for year/month/day. It defaults to the current date. This default can be overridden by entering a default value for the parameter. Default Values should be entered in '????' format.

4.6.5 Region

Prince George Forest Region

A list of all the regions in the province, defaulting to the user's own region. If the user does not belong to a specific region, (e.g. Headquarters users), then the region pull-down will default to the first item in the list.

Information from the FL_USER and FL_USERID tables is used to determine the user's region. If the user does not have a VM account, or if the user's VM user name is different from their intranet user name, then no data will be available in these tables, and the region pull-down will default to the first item in the list.

4.6.6 District

Chilliwack Forest District

A list of all the forest districts in the province, defaulting to the user's own district. If the user does not belong to a specific district, (e.g. Headquarters users), then the district pull-down will default to the first item in the list.

Information from the FL_USER and FL_USERID tables is used to determine the user's district. If the user does not have a VM account, or if the user's VM user name is different from their intranet user name, then no data will be available in these tables, and the district pull-down will default to the first item in the list.

4.6.7 Custom Validation Types

In addition to the five built in validation types, there is also a facility for defining custom types. The "Manage Parameter Types" button at the bottom of the parameter entry form will take you to the interface for setting up custom validation types. This is discussed in more detail in section 6. Once you are finished defining a custom type, clicking on the refresh button at the bottom of the parameter entry form will update the list of available validation types to include the new type that you just defined.

### 4.7 Default Value

4.7.1 Default Value specifies the default value for the pull-down. This maps to the option value of the pull-down, not the option text. Entering a value on this screen will over-ride any built-in default value or custom type default value. Leave this field blank if you want to use the pre-defined default.

**Below are some guidelines for entering default values for the built-in validation types:**

| | |
|---|---|
| Fiscal Year End | Enter the 4 digit year |
| Oracle Cursor Reference | Default values will be ignored. |
| Date | Enter default dates in YYYY-MM-DD format, using 2 digits for both month and day. |
| Region | Enter the numeric ORG_UNIT_NO, not the three letter code or name. |
| District | Enter the numeric ORG_UNIT_NO, not the three letter code or name. |
| Custom Table Based Parameter Types | Table based parameter types use a stored procedure to produce the pull-down menu. The first column returned by the stored procedure becomes the values for the pull-down, and the second column becomes the option labels. The default value should match one of the values returned in the first column. |
| Custom Free Form Parameter Types | A free form parameter type option has both a label and a value. The default value for a parameter should match one of the values for the specified free form parameter type. |

### 4.8 Required

4.8.1 If this parameter is selected, then the user will be required to fill in the parameter before being able to generate the report.

### 4.9 Other form elements on this screen

| | |
|---|---|
| ↓ ↑ | Move entries up and down, effectively changing the prompt # of the entries. |
| Add | Adds the current entry to the list. The change is not saved to the database until you click on Back, Next, or Refresh. |

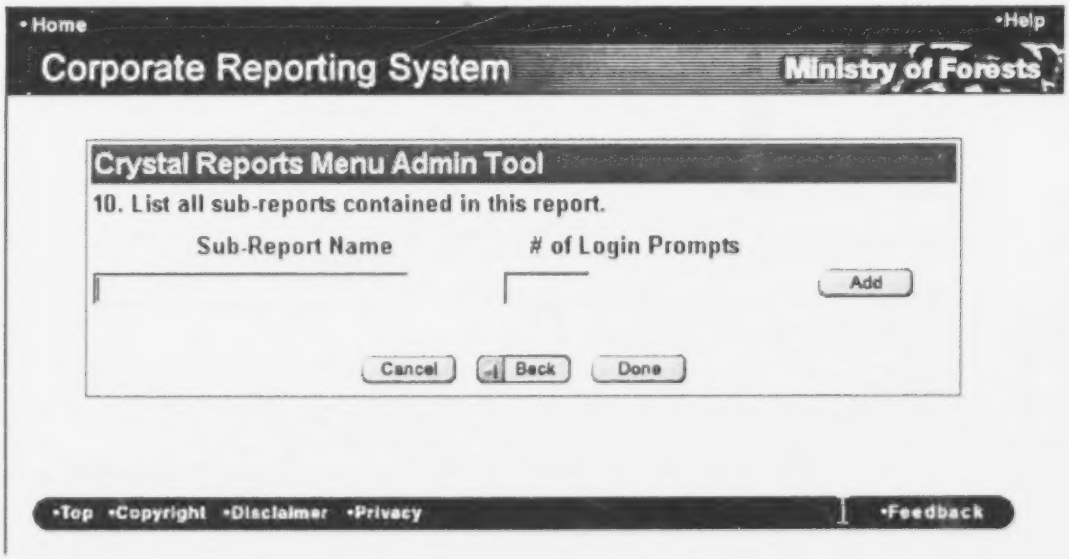
| | |
|---|---|
| | Turn this static text item into form fields so it can be modified. |
| Delete | Deletes the entry from the list. The change is not saved to the database until you click on Back, Next, or Refresh. |
| Update | Appears next to an entry that is being edited. Saves the changes to the list. The changes are not saved to the database until you click on Back, Next, or Refresh. |
| Cancel | Return to the admin menu. Category will default to the category containing this report. All changes to the list will be lost, unless you click on Back, Next, or Refresh |
| Manage Parameter Types | Launch the screen for adding new custom validation types. See section 6 for details. |
| Refresh | After you have added or modified custom validation types from the Manage Parameter Types option, click on this button to update the list of available validation types. |
| Back | Save changes and return to the previous screen (the main report information form). |
| Next | Save changes and move to the next screen (the sub-report information screen) |

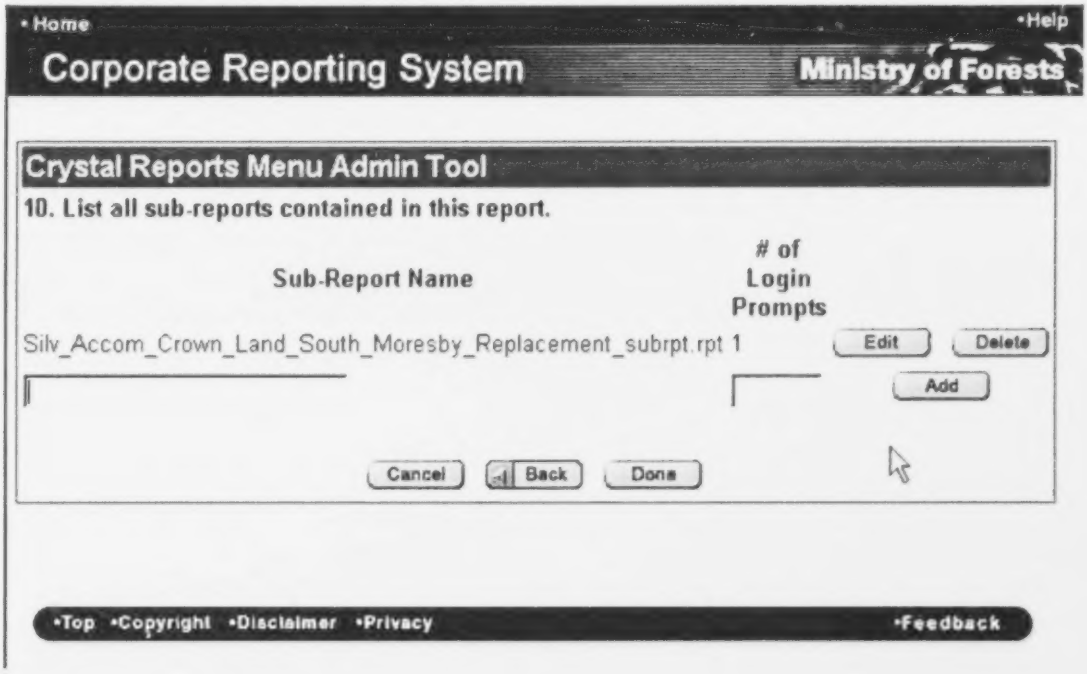
**4.10 Click on the next button to move to the sub-report information screen.**

# 5 Entering Sub-Report Information

## 5.1 Sub-Report Information Screen

When a report contains sub-reports, the Crystal Web Component Server needs to pass the user name and password to each data object accessed by each sub-report.






### 5.2 Sub-Report Name

This is the named used to refer to the sub-report in the Crystal Designer. It is typically the name of the file that was originally used to create the sub-report before it was inserted into the main report. If the sub-report name ends with a .rpt extension, then this extension is also necessary.

### 5.3 # of Login Prompts

The number of Oracle tables, stored procedures and views accessed by the sub-report. If the sub-report is using a stored procedure, then this value will typically be "1".

### 5.4 Other form elements on this screen

| | |
|---|---|
| Add | Adds the current entry to the list. The change is not saved to the database until you click on Back, or Done. |
| Edit | Turn this static text item into form fields so it can be modified. |
| Delete | Deletes the entry from the list. The change is not saved to the database until you click on Back, or Done. |
| Update | Appears next to an entry that is being edited. Saves the changes to the list. The changes are not saved to the database until you click on Back, or Done. |
| Cancel | Return to the admin menu. All changes to the list will be lost, unless you click on Back or Done. |
| Back | Save changes and return to the previous screen (the parameter |

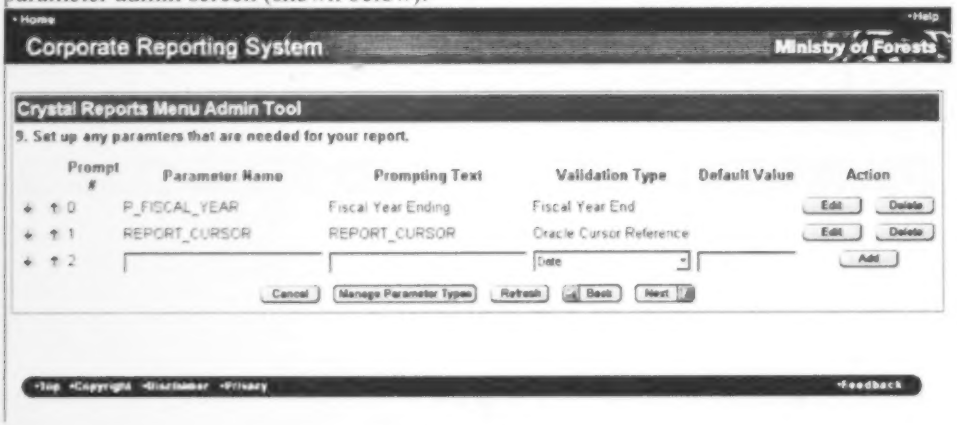
| | |
|---|---|
| | information form). |
| Done | Save changes and return to the admin menu. |

### 5.5 Click on the Done button to return to the main menu

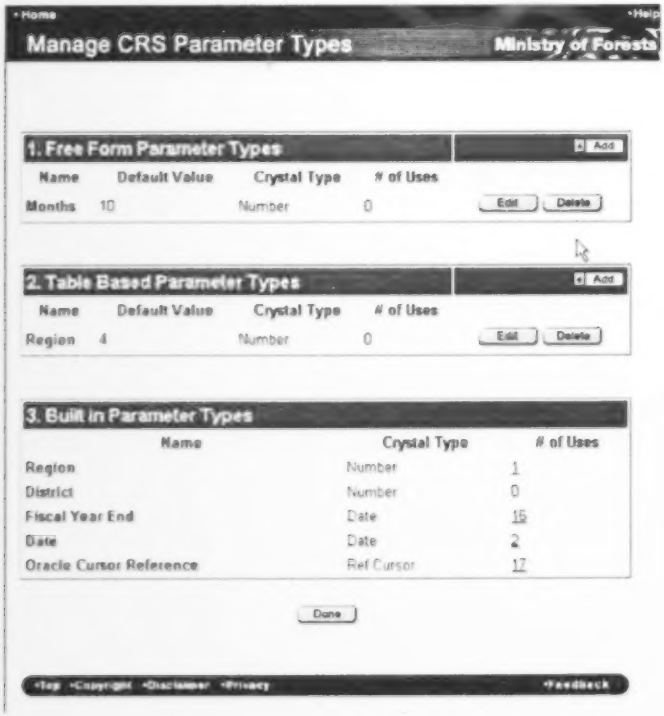
# 6 Managing Parameter Types

### 6.1 Launch the parameter type admin interface

6.1.1 Launch the parameter type admin interface by clicking the Manage Parameter Types button from the report parameter admin screen (shown below).




6.1.2 New windows will pop-up showing the screen below.



## 6.2 Types of Parameters

6.2.1 There are three main groups of parameter types, which are shown on the main parameter type admin screen.

*6.2.1.1 Free Form Parameter Types*

A pull-down list of items, based on a list of selections that you enter.

*6.2.1.2 Table Based Parameter Types*

A pull-down list of items, with the list of selections based on the results of a database query.

*6.2.1.3 Open-Text Parameter Types*

A free form input text box that can be configured to allow on specific entry items.

*6.2.1.4 Built-in Segmented Parameter Types*

A segmented (multiple input boxes for the same parameter) field that cannot be configured.

*6.2.1.5 Built-in Parameter Types*

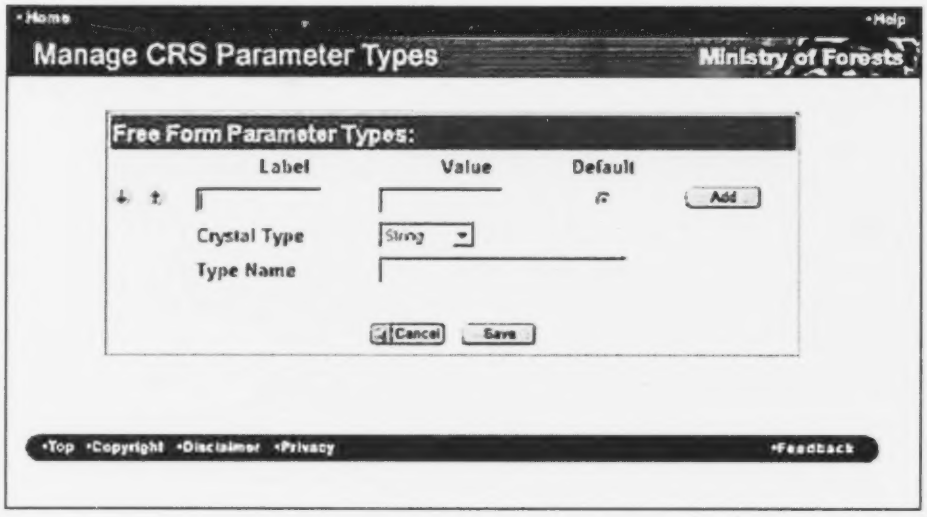
A pull-down list or other form input element, hard coded into the system. Adding a new built in parameter types would involve Java programming. Built in parameter types are listed on the screen for information only. You cannot add, edit, or delete built in parameter types through the web interface.

### 6.3 # of Uses

6.3.1 The number of uses field shows how many times that particular parameter is used throughout the system. If the number is greater than 0, it will be displayed as a link. Upon clicking that link, the user will be displayed a list of reports that uses that parameter. A parameter that is being used in one or more report may not be deleted until it is either removed from all reports or the reports that use this parameter are deleted.

### 6.4 Adding a Free Form Parameter

6.4.1 Click the Add button in the title bar of the free form parameter types. You will then be presented with the screen below. Enter a label and a value for each parameter value. Select which value you want to be default. This will be the value the drop-down list defaults to when displayed to the user. Then, select the Crystal validation from the drop-down list. This tells the application what type of data to expect for this parameter. Finally, enter a name for your parameter type and click 'Save'. You can also click 'Cancel' to abort and return to the main parameter type menu.

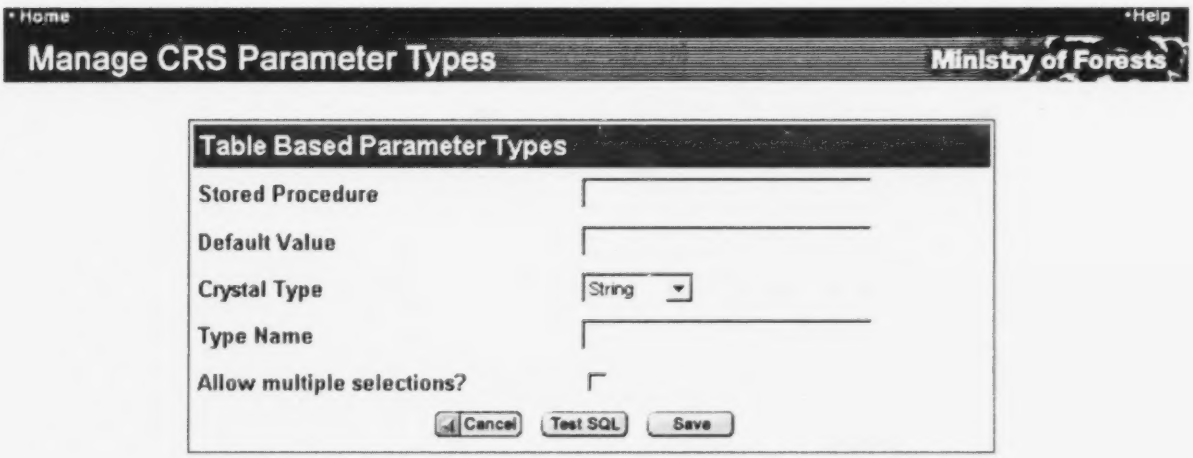


## 6.5 Adding a Table Based Parameter

6.5.1 Click the [Add] button in the title bar of the table based parameter types. You will then be presented with the screen below. Enter the name of the stored procedure that will be used to generate the parameter. Then, enter the default value that this parameter will use when displayed to the user. Select which Crystal type this parameter expects and finally, enter the name this parameter will go by in the system.

The "Allow Multiple Selections" checkbox will change the display from a drop-down list to a multiple selection list box. This way, the user can select multiple options from the parameter.

6.5.2 The [Test SQL] button will display a new pop-up window that will show the results of the stored procedure used by this parameter as well as a sample drop-down list. If there is an error in your stored procedure or you neglect to enter a name of a stored procedure, you will see the error message generated by Oracle displayed in the pop-up window.



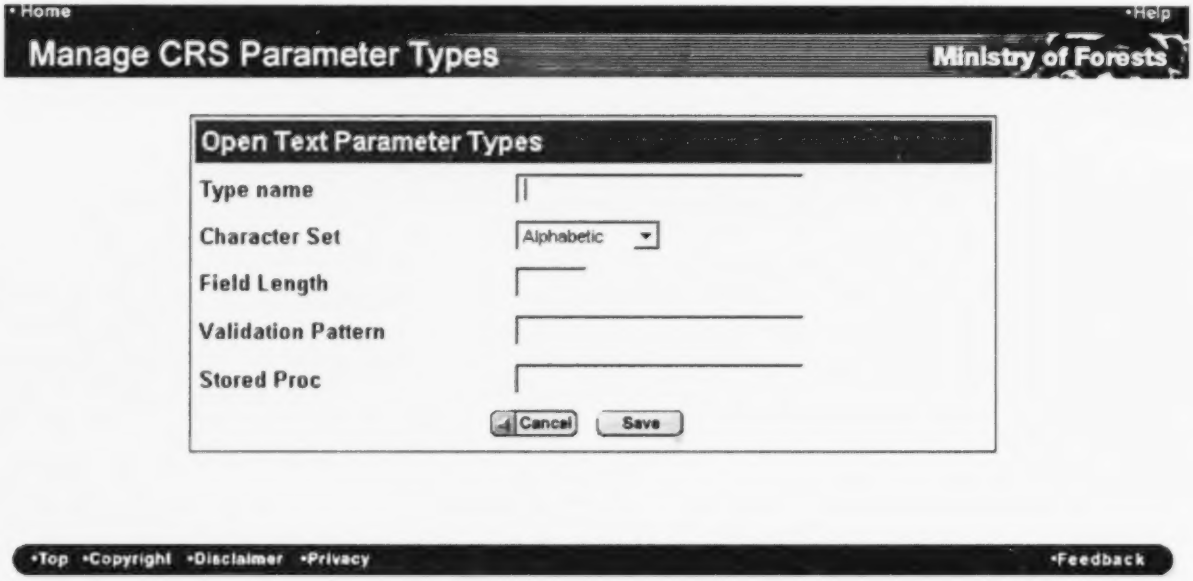
### 6.6 Closing the parameter type window

6.6.1 Click on the Save button to close the window and return to the report parameter admin screen.

### 6.7 Adding a Open Text Parameter

6.7.1 Click the Add button in the title bar of the open-text based parameter types. You will then be presented with the screen below. The parameters for this screen are:

Type Name – The name of the parameter
Character Set – The type of data for this field (Alpha, Numeric or Alphanumeric)
Field Length – How big the entered values can be
Validation Pattern – A string to determine how to validate the entered data
Stored Proc – A stored procedure used to validate the field data



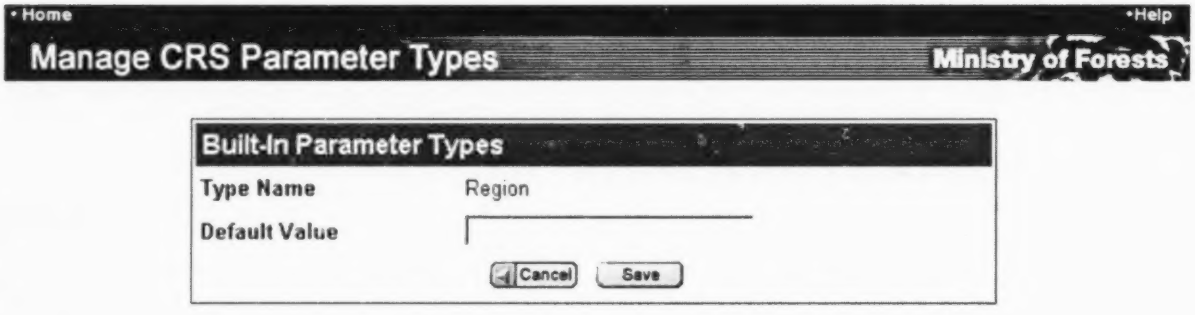
### 6.8 Closing the parameter type window

6.8.1 Click on the [Save] button to close the window and return to the report parameter admin screen.

### 6.9 Editing a Built-In Parameter

6.9.1 Click the [Edit] button beside the built-in parameter. You will then be presented with the screen below. The parameter for this screen is:

Default Value – The default value to set this field to




### 6.10 Closing the parameter type window

6.10.1 Click on the [Save] button to close the window and return to the report parameter admin screen.

# 7 Appendix: Common Messages

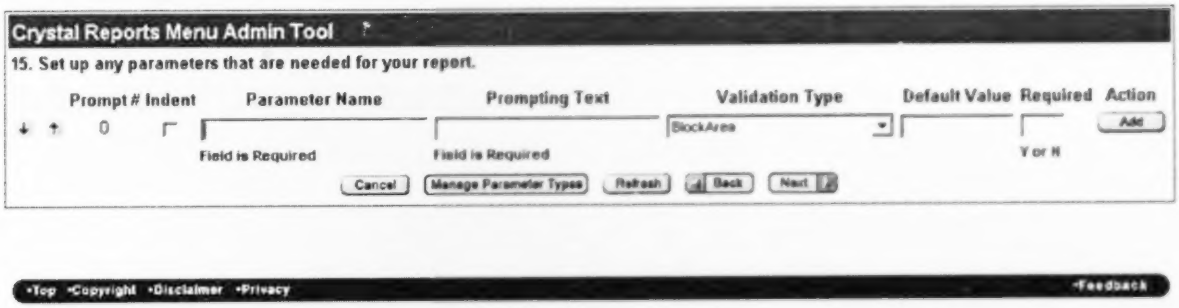
## 7.1 Report Information Screen

### 7.1.1 Validation errors for required form fields

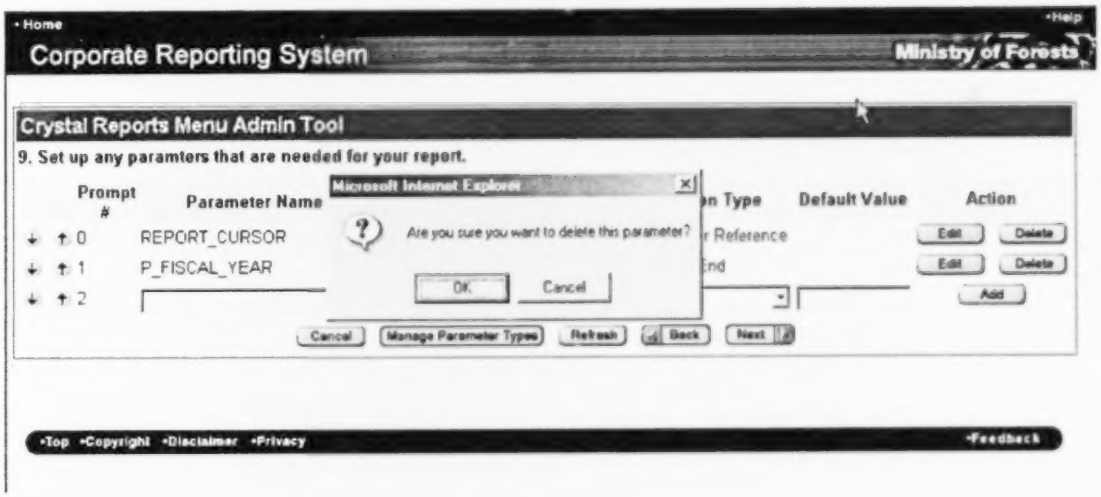
Crystal Reports Menu Admin Tool
1. Enter a Report Code. (e.g. CRS-SLV-00001)
Field is Required
2. Enter a Name for this report.
Field is Required
3. Select which report menu this report will appear on.
---------- Ricky Reports10
---------- Integrated Silviculture Information System
---------- Major License System
---------- Plans and Goals
---------- Pre-harvest Silviculture Prescription
---------- Maintain Project Program
---------- Record Activities
---------- Report Preview Facility
---------- Silviculture
4. Enter the URL of a report submission screen from an external MOF application. If you put a value in this field, you can ignore the remaining fields on this form.
5. Enter the report author
Field is Required
6. Enter the relative web path for this report.
Field is Required
7. Enter the primary Stored Procedure. If the stored procedure parameters are not identical to the report parameters, then leave this field blank.
8. Enter the Stored Procedure name that will validate the business rules of this report. If the stored procedure is not nessescary leave this field blank.
9. How many Crystal login prompts does this report have on the main report? (not including sub-report login prompts)
Must be an Integer
10. Select the Group.
Compliance Information Management System
11. Status
12. Report processing power. 'Low' will show all options, 'Medium' will show only 'email report' option
Low processing power
13. Enter the business description of the report (4000 characters maximum)
Field cannot contain more than 4000 characters. Currently, there are 4040 characters
14. Enter the technical description of the report (4000 characters maximum)
Field cannot contain more than 4000 characters. Currently, there are 4040 characters
Cancel
Back
Next
•Top •Copyright •Disclaimer •Privacy
•Feedback

## 7.2 Parameter Information Screen

### 7.2.1 Validation errors for required form fields

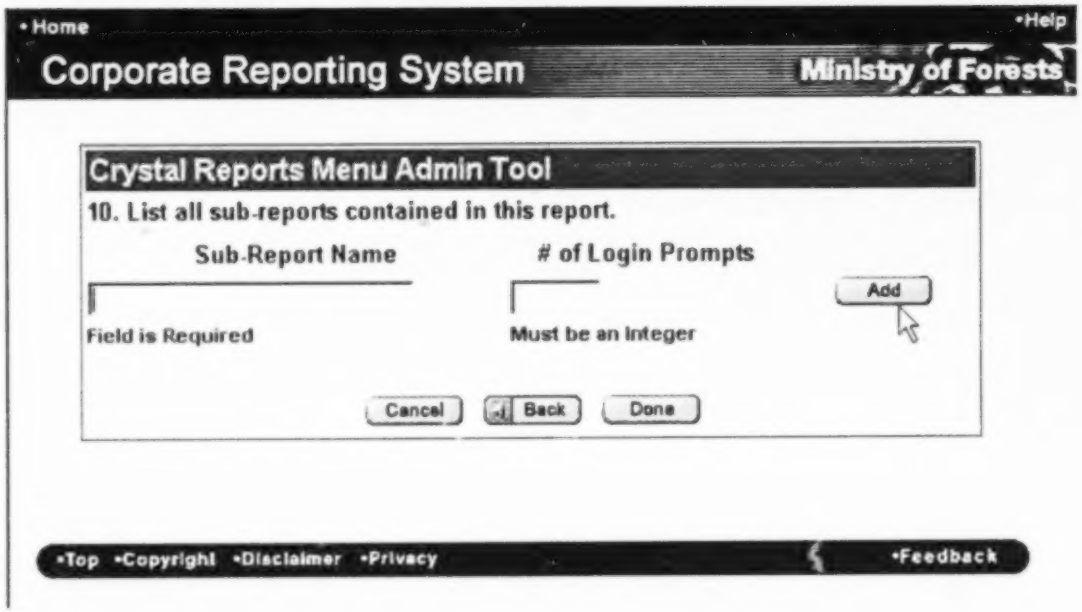



### 7.2.2 Confirmation message for deleting parameters from a report



### 7.3 Sub-Report Information Screen

7.3.1 Validation errors for required form fields




7.3.2 Confirmation message for deleting sub-reports